

REMARKS

Additional Claims

New claims 14-19 have been added to better define what the Applicant regards as the invention. Applicant urges that the additional claims are fully supported by the original disclosure and, therefore, do not represent new matter.

Rejections Under 35 U.S.C. §112

Applicant has amended claims 2, 3, and 12 to clarify the language "said at least one insert".

Rejections Under 35 U.S.C. §103(a)

Claims 11-19 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Oare et al., U.S. 5,871,600 (Oare '600) in view of Wolpers et al., U.S. 5,342,900 (Wolpers '900), or Horpel et al., EP 385,703 (EP '703). Applicant respectfully traverses this rejection.

Applicant urges that a prima facie case of obvious have not been made. For reasons stated herein, the asserted combination of references does not teach nor make obvious a runflat tire as recited in the claims. Specifically, the references do not teach nor make obvious the use of a runflat tire having at least one insert comprising a rubbery polymer and 1,6-bis(N,N'-dibenzylthiocarbamoyldithio)-hexane. New claims 14-19 recite limitations not taught nor suggest by any of the cited references, alone or in combination, and are, therefore, independently patentable. Applicant urges that the rejection of the claims be withdrawn.

Oare '600 teaches a runflat tire 10 having at least one sidewall filler (i.e., insert) 42, 46 (Figs. 2A,B). The insert 42, 46 is required to be made of a rubber composition imparting a desired level of stiffness and dimensional stability to the tire sidewall 20 (column 14, lines 63-65). A desirable level of stiffness is defined as being indicated by a 100% modulus in a range of 5 to 7 MPa (column 15, lines 34-60). As the Examiner correctly states, Oare '600 does not mention the use of 1,6-bis(N,N'-dibenzylthiocarbamoyldithio)-hexane in the insert 42, 46 for any reason, let alone to obtain the desired stiffness for the insert 42, 46 in the runflat tire 10. To supplement the teaching of Oare '600, the Examiner cites Wolpers '900 or in the alternative EP '703. Applicant asserts that the teaching of EP '703 in the abstract is essentially equivalent to Wolpers '900, and the arguments herein regarding Wolpers '900 apply equally to EP '703.

Wolpers '900 teaches vulcanization of diene rubbers using 1,6-bis(N,N'-dibenzylthiocarbamoyldithio)-hexane (i.e., BDBzTH) (column 4, lines 4-39). Wolpers '900 further teaches that the advantages of the invention include cure rate, crosslink yield, reversion resistance, and aerobic aging resistance. Nowhere does Wolpers '900 suggest that a rubber

composition will have the requirements for the runflat insert of Oare '600, specifically a desirable level of stiffness is defined as being indicated by a 100% modulus in a range of 5 to 7 MPa. In fact, in all inventive examples 1-23 illustrated by Wolpers '600, the 100% modulus is in a range of from 1.3 to 2.8 MPa, well below the 100% modulus of 5 to 7 MPa taught by Oare '900 to obtain the desired stiffness. Thus, the use of BDBzTH as taught by Wolpers '600 does not suggest to one skilled in the art that BDBzTH could be used in a runflat insert as in Oare '900, and one skilled in the art would not expect from the teaching of Wolpers '600 that a rubber composition containing BDBzTH would successfully meet the requirements for stiffness in Oare '900. In fact, Wolpers '600 teaches away from the use of BDBzTH in a runflat insert, since the 100% modulus values taught therein are well below those required by Oare '900 for desirable stiffness. Applicant, therefore, asserts that a prima facie case of obviousness has not been made, and that the obviousness rejection be withdrawn.

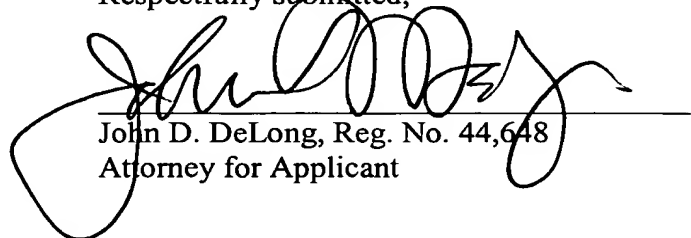
Applicant urges that new claims 14-19 are independently patentable in view of the cited art. Claims 14-19 include limitations drawn to syndiotactic polybutadiene (support at page 6, lines 1-3; page 6, lines 24-26; page 23, table 1), and the use of sulfur at a concentration of 0.5 to 8 phr (support at page 12, lines 15-17). Nowhere does the cited art teach or make obvious a runflat insert including 1,6-bis(N,N'-dibenzylthiocarbamoyldithio)-hexane and syndiotactic polybutadiene. Moreover, Wolpers '600 specifically teaches that the sulfur concentration used with BDBzTH must be in a range of 0.05 to 0.3 phr (column 4, lines 25-39; claim 1). Applicant urges that new claims 14-19 are, therefore, fully patentable over the cited art.

Conclusion

It is believed that all of the claims now pending in the subject patent application are allowable, and that it is now appropriate to allow the subject patent application. Such an allowance is accordingly respectfully requested.

Applicant hereby claims priority of an earlier-filed provisional application identified above.

Respectfully submitted,



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